1.0 Fume Data

Tests were conducted at Warton Metals Laboratory to calculate the weight loss of Omega fume at various flux contents, soldering temperatures and contact times.

![Graph showing weight loss of fume at different conditions](image)

The results from the test show that less fume is generated using lower temperatures and using a lower flux content wire.

2.0 Tip Extraction Data

Using a Purex Tip Extraction System courtesy of Hi-Tech UK Ltd. A study was made of the effects Omega has on blocking tip extraction pipes in comparison to various rosin based cored solder wires.

The diagram below shows Omega as the standard, and that a conventional 3% Rosin Cored Solder would deposit nearly 6 times the amount of fume within the tip extraction pipes.

![Diagram showing fume deposition](image)

The photographs show that greater damage occurs with the rosin fume due to its glutinous nature, therefore reducing the filters potential life.

3.0 Filter Damage

Using a Purex Tip Extraction System courtesy of Hi-Tech UK Ltd. and with the assistance of Sheffield University a study was made of the effect on filters of Omega fume in comparison of rosin fume.

Using equivalent Flux % Cored Wires and the same quantity of wire photographs were produced at 2000x magnification to show both types of fume.

The nature of rosin fume on extraction system filters.

![Photograph of rosin fume](image)

The photographs show that greater damage occurs with the rosin fume due to its glutinous nature, therefore reducing the filters potential life.

4.0 Further Information

For further information, please do not hesitate to contact Sales & Technical Enquiries on 01706 218888.